

ACS DEPARTURE MODING

PCS 1. ENABLE DEPARTURE SWITCH MONITORING FOR ACS MODING

ACS Moding

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'Departure'

sel PMA2 Departure Response SW Primary NCS - Command

cmd Enable_Arm Execute

√PMA2 Departure Response SW Arm Primary NCS - X

sel PMA2 Departure Response SW Primary NCS - Command

cmd Enable Execute

√PMA2 Departure Response SW Arm Primary NCS - Blank

√PMA2 Departure Response SW Primary NCS - Ena

sel PMA2 Departure Response SW Secondary NCS - Command

cmd Enable_Arm Execute

√PMA2 Departure Response SW Arm Secondary NCS - X

sel PMA2 Departure Response SW Secondary NCS - Command

cmd Enable Execute

√PMA2 Departure Response SW Arm Secondary NCS - Blank

√PMA2 Departure Response SW Secondary NCS - Ena

2. VERIFY DEPARTURE EVENT SOFTWARE STATUS

'Departure'

√Departure Event Primary NCS - Blank

√Departure Event Secondary NCS - Blank

3. ENABLE LED MODE INDICATORS

NOTE

Each of the primary and secondary commands turns on two of the four ACS LED indication lights (i.e., four total). LED configurations: On - Active Attitude Control, Off - Software is Inhibited, Flash - Station in Free Drift.

'ACS Configuration'

sel LED Control SW Primary NCS - Command

cmd Enable Execute

√LED Control SW Primary NCS - Ena

√PMA2 LED State Primary NCS - Flash

sel LED Control SW Secondary NCS - Command

cmd Enable Execute

√LED Control SW Secondary NCS - Ena

√PMA2 LED State Secondary NCS - Flash

Visual verification by the orbiter crew that LED Indicators are flashing (-Z windows)

4. MONITOR AND VERIFY NCS SEPARATION SIGNALS; VERIFY ORBITER DEPARTURE AND POST SEPARATION LED MODE CHANGE

Perform Config C&DH for Orbiter Undocking, all (C&DH:), then

Verify **MCC-H/MCC-M GO** for Orbiter Departure.

NOTE

1. Monitor the change in parameter values during orbiter undocking. At orbiter separation (i.e., Undocking Complete is true and Interface Sealed is false), the attitude control countdown timer is initiated.
2. Monitor the timer. The primary Departure Event is received when the countdown timer reaches zero. The occurrence of this event prompts the FGB to reactivate its ACS system (this takes approximately 30 minutes).
3. For flights 2A through 3A, orbiter crew interface will be lost at OIU disconnect.

The following will be conducted via ground control.

PCS

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'Departure'

√PMA2 Interface Sealed Primary, Secondary NCS - Blank

√PMA2 Undocking Complete Primary, Secondary NCS - X

√Countdown Timer Primary NCS (Decreasing from preset Back Off Time)

√Departure Event Primary NCS - X

√Countdown Timer Secondary NCS (Decreasing from preset Back Off Time)

√Departure Event Secondary NCS - X

Visual verification by orbiter crew that LED Indicators are On (-Z windows)

5. VERIFY RUSSIAN SEGMENT MODE STATUS

'ACS Configuration'

√PMA2 LED State Primary NCS - On

√PMA2 LED State Secondary NCS - On

√RS Mode Primary NCS - Cntl

√RS Mode Secondary NCS - Cntl